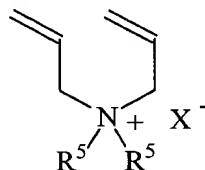


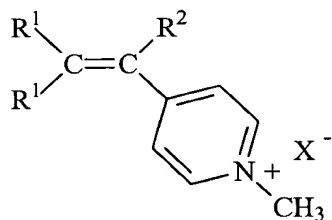
6. A composition according to Claim 5 wherein said dye maintenance polymer is a co-polymer comprising a linearly polymerizing monomers and a cyclically polymerizing monomer, said cyclically polymerizing monomer having the formula:



wherein R⁵ is C₁-C₄ alkyl, and mixtures thereof; X is a water soluble anion.

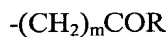
7. A composition according to Claim 5 wherein the dye maintenance polymer is selected from the group consisting of homopolymers, co-polymers, ter-polymers and mixtures thereof, of diallyl dimethylammonium chloride, bromide or methyl sulfate and a co-monomer selected from the group consisting of acrylic acid, methacrylic acid, C₁-C₆ alkylmethacrylate, C₁-C₆ alkyl acrylate, C₁-C₈ hydroxyalkylacrylate, C₁-C₈ hydroxyalkylmethacrylate, acrylamide, C₁-C₁₆ alkyl acrylamide, C₁-C₁₆ dialkylacrylamide, 2-acrylamido-2-methylpropane sulfonic acid or its alkali salt, methacrylamide, C₁-C₁₆ alkylmethacrylamide, C₁-C₁₆ dialkylmethacrylamide, vinyl formamide, vinylacetamide, vinyl alcohol, C₁-C₈ vinylalkylether, vinyl pyridine, itaconic acid, vinyl acetate, vinyl propionate, vinyl butyrate and mixtures thereof.

8. A composition according to Claim 5 wherein said dye maintenance polymer a co-polymer comprising a linearly polymerizing monomers and a cyclically polymerizing monomer, said cyclically polymerizing monomer having the formula:



wherein R⁵ is C₁-C₄ alkyl, and mixtures thereof; X is a water soluble anion.

9. A composition according to Claim 5 comprising a co-polymer wherein Z has the formula:



wherein each R is independently -O(CH₂)_nN(R³)₂; -O(CH₂)_nN⁺(R³)₃X⁻; -(CH₂)_nN(R³)₂; -(CH₂)_nN⁺(R³)₃X⁻; and mixtures thereof, m is 0, n is from 2 to 4.